



Many Voices Working for the Community

Oak Ridge Site Specific Advisory Board

Monthly Meeting of the Oak Ridge Site Specific Advisory Board

Approved October 9, 2019, Meeting Minutes

The Oak Ridge Site Specific Advisory Board (ORSSAB) held its monthly meeting on Wednesday, October 9, 2019 at the DOE Information Center, 1 Science.gov Way, Oak Ridge, TN, beginning at 6 p.m. Copies of referenced meeting materials are attached to these minutes. A video of the presentation portion of the meeting was made and is available on the board's YouTube site at www.youtube.com/user/ORSSAB/videos.

Members Present

Leon Baker
Andrea Browning
Richard Burroughs
Sarah Eastburn
Amy Jones
Noah Keebler

Shell Lohmann, Chair
Harriett McCurdy
Georgette Samaras
Leon Shields, Vice Chair
Bonnie Shoemaker,
Secretary

Fred Swindler
John Tapp
Ed Trujillo
Robert Whitaker

Members Absent

Bill Clark
Marite Perez

Brooke Pitchers¹
Rudy Weigel

Dennis Wilson

¹Third consecutive absence

Liaisons, Deputy Designated Federal Officer, and Alternates Present

Dave Adler, ORSSAB Deputy Federal Designated Officer, DOE-OREM

Dennis Mayton, OREM

Melyssa Noe, ORSSAB Alternate Deputy Designated Federal Officer (DDFO), OREM

Kristof Czartoryski, Tennessee Department of Environment and Conservation (TDEC)

Carl Froede, U.S. Environmental Protection Agency (EPA) (call-in)

Others Present

Shelley Kimel, ORSSAB Support Office

Sara McManamy-Johnson, ORSSAB Support Office

Six members of the public were present.

Liaison Comments

Mr. Adler – Mr. Adler said the crews are now well into construction on the MTF at Y-12 National Security Complex (Y-12). He said that at East Tennessee Technology Park (ETTP) crews have met a couple of milestones – removing centrifuges and preparing for shipment out west. On the back of the site at the Barrier Plant, it has all been removed and re-contoured and will soon be a grassy field.

Mr. Czartoryski – None.

Mr. Froede – Mr. Froede said the dispute on the Environmental Management Disposal Facility (EMDF) remains at the administrator level and they are awaiting the decision.

Presentation

Mr. Shields introduced Dave Adler, presenter for the evening's topic on ETTP Groundwater Updates.

Mr. Adler said most of the surface work has been done, but there is still a lot of work to be done on the groundwater contamination and decisions need to be made.

Mr. Adler said OREM hopes to provide EPA and TDEC with a draft of a Feasibility Study Report for the Main Plant Area in November. That report, once it's finalized, will serve as the basis for making decisions on how to proceed with groundwater cleanup.

Next, he outlined the current timeline for upcoming groundwater cleanup activities at ETTP. Proposal for the Main Plant Area tentatively planned for April 2021.

After addressing Main Plant Area groundwater decisions, OREM will address groundwater contaminants in the K-31/K-33 site.

He said OREM has 471 groundwater monitoring wells at ETTP.

Next, Mr. Adler provided background information on groundwater investigations at ETTP's K-31/K-33 since 1987.

He said the results from the most recent sampling event at K-31/K-33 had somewhat encouraging results. Three wells indicated results slightly exceeding drinking water standards for antimony, chromium and nickel. He said groundwater use will be restricted in any case in the future, but the test results indicated heavy intervention will likely not be needed.

The majority of the contaminated groundwater at ETTP is located at the Main Plant Area at the site, he said, and he provided background on the groundwater investigations that have been conducted at the site since 1997. Currently, there are about 355 monitoring wells in place at the Main Plant Area, with wells concentrated in areas that were known to be sources of contamination, but also spread out to get an idea of the "big picture."

Multiple technical alternatives are being evaluated for remediation. He said a feasibility study was developed that looked at a range of alternatives for the set of different plumes on site. The list of technologies being evaluated was developed in collaboration with the EPA and TDEC, and he said a future presentation would delve more deeply into the details of those technologies.

OREM is working with TDEC and EPA to establish a final Record of Decision (ROD) for Main Plant Area groundwater to enable reindustrialization. He said aggressive intervention would lead to quicker results, but it would also be more costly.

In summary, Mr. Adler said OREM has completed multiple investigations to try to define the problem and is in a good position to make some decisions on what to do next.

After the presentation, board members asked the following questions:

- Mr. Swindler asked where the DNAPL fits into the groundwater investigations.
 - Mr. Adler said DNAPL contamination is present at ETTP, and it is one of the most challenging problems to solve.
- Mr. Swindler asked what risk DNAPL poses.
 - Mr. Adler said DNAPL was introduced in industry as solvents. The risk comes about when they enter into groundwater, they can cause toxicity. Some types are known carcinogens. He said he doesn't think there are any significant human health risks with it because nobody is drinking the water.
- Ms. Shoemaker asked what OREM's remediation goal is for the groundwater at ETTP in terms of target contaminant levels.
 - Mr. Adler said the law requires OREM to try to restore drinking water standards, so they will try to do so. However, that may not be possible and/or may not be possible within a reasonable time frame, so OREM will look at alternatives to get as close to that as possible, and they will also look at ways to prevent people from drinking the water. He said ultimately it would be the Proposed Plan, the Public Comment, and the Record of Decision that establish what the ultimate requirement will be.
- Ms. Shoemaker asked if OREM could later decide that there's nothing more that can be done and no more money should be spent on it.
 - At a minimum, OREM has to ensure everyone is out of harm's way, so that requires monitoring and use prohibitions. He said, though, that he believes there will be better results than that.
- Ms. Samaras asked how often the wells are monitored.
 - Mr. Adler said it varies. There have been times when there have been years between, and sometimes it's monitored quarterly. He said for the most part, quarterly to semi-annually.
- Mr. Trujillo asked if discussing the Feasibility Study indicates all the necessary testing is completed.
 - Mr. Adler said OREM thinks they are close to having the information needed to identify conceptual redial approaches and start making decisions. However, he said, more testing will be needed after the approach is selected in order to design the process.
- Mr. Trujillo asked whether there will be a long lapse of time between the Feasibility Study and the Record of Decision.
 - Mr. Adler said yes, it is a couple of years. Assuming there's not a requirement to go back and do additional investigation, it still is a multi-month process to complete a feasibility study.

- Mr. Trujillo asked whether the technologies will be judged based on just money.
 - Mr. Adler said money matters, but they also will be judged in terms of meeting legal requirements, time it takes to achieve cleanup objectives, how the remedy could affect future land use, etc.
- Mr. Trujillo asked whether the Feasibility Study would be used by several different contractors.
 - Mr. Adler said it's being developed by a team of contractors and it will be used by DOE, EPA, the State, and the public in selecting a remedy. Then, he said, new contractors will come in to implement whatever is selected.
- Mr. Trujillo asked whether institutional controls can be used to control risks while allowing OREM more time to finalize the Feasibility Study.
 - Mr. Adler said OREM will ensure safeguards are in place. He said the law places a preference on using technology and treatment to get things done as quickly as possible, but it is balanced by cost and other factors.
- Ms. Browning asked if monitoring areas are alternated, and how they are selected.
 - Mr. Adler said OREM works with EPA and TDEC to determine that.
- Mr. Shields asked whether any residents could be drinking unsafe water because contaminants had passed the wells undetected between well samplings.
 - Mr. Adler said he that was unlikely because there is extensive geologic isolation at ETTP.
- Ms. Amy Jones asked whether residents who have wells and are receiving OREM-provided public water access make their wells available OREM for testing purposes.
 - Mr. Adler said yes, they are. He said OREM spent a few hundred thousand dollars adding water lines to roads that have homes on them and then added the lateral lines to the homes and the water provided through those lines, and residents agreed to provide OREM with access to their wells.
 - Mr. Czartoryski said TDEC has conducted offsite residential well sampling in the past, however under DOE grants there is no money in the budget for it, so those projects are not currently performed.
 - In relation to presentation charts of the Cost and Remediation Time, Mr. Czartoryski added that regulators also look at effectiveness when looking at remedies.

Questions from the Public

Mr. Gibson asked Mr. Adler to comment on potential vapor intrusion risks at ETTP.

Mr. Adler said the issue is the concern that solvents in the groundwater can volatilize and migrate up through the soil column and become an exposure issue to people above ground. He said there are sites where that is an issue. However, he said OREM evaluated that concern at ETTP and volatile organics rising to the surface were not detected at the site. He added, though, that property transfer contracts for the site require safeguards be added to buildings if necessary.

Mr. Clasure asked how deep the wells are typically, and whether the lake levels influence the

groundwater table.

Mr. Adler said the lake level does influence the groundwater table. He said the wells vary in depth from 10s of feet to many 10s of feet.

Public Comment

Mr. Gibson said it had been 99 days since notice was posted that DOE intended to issue a draft Request for Proposal (RFP) for UCOR's expiring contract within 15 to 60 days of that date, July 2. Also, he said there's a report called the Oak Ridge Reservation Annual Site Environmental Report and there's a good section on ETTP that includes a little more detail on groundwater to go with Mr. Adler's presentation. I just wanted to bring it to your attention.

Board Business/Motions

1. Ms. Lohmann asked for a motion to approve the meeting agenda.
 - a. **10/9/19.1 Motion to approve the agenda**
Motion made and seconded. Motion passed unanimously.
2. Ms. Lohmann presented the August Annual Planning Meeting minutes and asked for a motion to approve.
 - a. **10/9/19.2 Motion to approve previous meeting minutes**
Motion made and seconded. Motion passed unanimously.
3. Mr. Shield asked for nominations for EM & Stewardship Committee officers. He said Ms. Jones and Mr. Trujillo had expressed their interest for the Chair positions. There were no other nominations from the floor. Mr. Trujillo withdrew, so Ms. Jones was selected unopposed. Mr. Tapp had expressed his interest previously, and there were no other nominations from the floor. Mr. Tapp was selected unopposed for Vice Chair.

Responses to Recommendations & Alternate DDFO Report

Ms. Noe said the response to Recommendation 245 is included in the meeting materials and has been emailed to members. She added that new member recruitment is underway and asked members to help share that information. Regarding issue groups, Ms. Noe said a recommendation is not necessary for the groundwater update topic, it was to help prepare members for the upcoming Feasibility Study draft due for release in November. She added that the response to Recommendation 245 Budget Recommendation that was received by the board was OREM's response and the board will also receive an official response from headquarters.

Committee Reports

Executive – Ms. Lohmann said members reviewed the response from DOE to Recommendation 245 and were pleased with the responses. She said members discussed progress on the annual recruitment campaign and prepared for the upcoming Chairs meeting in Idaho.

EM & Stewardship – Mr. Shields said member attendance during the September EM & Stewardship Committee meeting was too low to vote for committee officers, so members decided to hold the nominations and vote during

this evening's board meeting since the majority of committee members are also board members and all board members are committee members. Mr. Shields reminded members that the Chair and Vice Chair will meet early with issue group members for the month's topic.

Additions to the Agenda & Open Discussion

None

Action Items

Open

None

Closed

None

The meeting adjourned at 7:05 p.m.

I certify that these minutes are an accurate account of the October 9, 2019, meeting of the Oak Ridge Site Specific Advisory Board.



Michelle Lohmann, Chair
Oak Ridge
Site Specific Advisory Board

11/13/19



Bonnie Shoemaker, Secretary
Oak Ridge
Site Specific Advisory Board

ML/sbm